

II. REMARKS

A. Overview Of The Claims

The claims of the present application are directed generally to methods of presenting material to a user on the basis of a generated schedule.

1. Independent Claim 2

Claim 2 sets forth a "method of controlling the outputting of mass medium program material at a subscriber station." The summary example at pages 533 *et seq.* of the specification discloses such a method. The output of the combined medium television program "Farm Plans of Europe" (Spec. p. 552, ll. 14-30) includes spot commercials related to the program (Spec. p. 553, l. 33 to p. 554, l. 11). Each farmer has a subscriber station. (Spec. p. 534, ll. 1-2.) The subscriber stations, termed "ultimate receiver stations" are illustrated in Figure 7 with specific configurations shown in Figures 7A-7F. The disclosed method *controls* how the "Farm Plans of Europe" program is output.

In general, the specification in the summary example discloses generating a crop planting plan for a farmer at his receiver station. A program instruction set is received with the "Farm Plans of Europe" combined medium program. The program instruction set causes the farmer's receiver station to select and generate a schedule for playing a series of commercial spots related to the farmer's crop planting plan. The commercial spots are stored on recorders at the farmer's receiver station. The recorders are controlled in order to play the commercials in accordance with the schedule generated by the program instruction set.

Claim 2 sets forth that the subscriber station includes "an output device, a memory, a receiver, and a processor, wherein the output device is capable of presenting mass medium program material." The specification and drawings disclose various output devices such as TV monitor 202M. The specification and drawings disclose a memory for recording information such as recorder/players 217 and 217A. The specification and

drawings disclose various receivers such as cable converter box 222. The specification and drawings disclose processors such as microcomputer 205. The TV monitor 202M is capable of presenting mass medium program material such as the "Farm Plans of Europe" program. (Spec. p. 539, ll. 1-5.)

Claim 2 sets forth that the "receiver has a signal output coupled as an input to the processor, said processor has an output operatively connected to a control input of said memory, and said memory is operatively connected to said output device for communicating mass medium program material to said output device." The specification and drawings disclose matrix switches 258 and 259 for selectively coupling the various components of the subscriber station. These couplings provide operative connections between the various components. The input apparatus, such as converter box 222, input their received information to matrix switch, 258. (Spec. p. 391, ll. 21-35.) The microcomputer receives its programming inputs from matrix switch 258. (Spec. p. 392, ll. 1-15.) The apparatus such as microcomputer 205 and recorder/player 217 communicate control information by means of matrix switch 259. (Spec. p. 393, ll. 29-31.) The recorder/player 217 transmits its programming outputs to matrix switch 258. (Spec. p. 392, ll. 1-15.) The TV monitor apparatus receives its programming inputs from matrix switch 258. (Spec. p. 392, ll. 16-27.) The function of the matrix switches is to couple or connect the various devices of the receiver station. Accordingly, the matrix switches provide operative connections or couplings between the recited components. This interconnection is shown in Figure 7 of the drawings.

Claim 2 sets forth a step of "storing mass medium program material and subscriber data, the subscriber data designating a subject of interest to of a subscriber." The specification discloses storing selected commercial spots at a selected recorder/player, 217 or 217A. (Spec. p. 553, l. 33 to p. 554, l. 11.) The specification also discloses storing the farmer's crop planting plan. (Spec. p. 551, ll. 11-14.) The farmer's crop planting includes data regarding the farmer and is, therefore, subscriber data. The

specification provides numerous details regarding the crop planting plans. (Spec. p. 548, l. 32 to p. 551, l. 10.) The farmer's crop planting plan designates the particular plan for the farm of interest to the farmer. The specification discloses how the crop planting is used as discussed below with respect to the interrelated claim steps.

Claim 2 sets forth a step of "receiving an instruct-to-generate signal." The specification discloses that the farmer's subscriber station receives a program instruction set. (Spec. p. 548, ll. 1-5.) The program instruction set is a signal that instructs the farmer's subscriber station to generate various data. The program instruction set is disclosed as being received within the first SPAM message. The specification provides numerous details regarding the program instruction set. (Spec. p. 548 *et seq.*)

Claim 2 sets forth a step of "generating a schedule by processing said subscriber data in response to said instruct-to-generate signal." The specification discloses generating a schedule of four selected commercial spots. (Spec. p. 551, ll. 15-18; p. 552, ll. 4-7.) The schedule of commercial spots is generated by processing the farmer's crop planting plan. (Spec. p. 551, ll. 26-30.) The schedule is generated in response to executing the program instruction set, which is a signal that instructs the farmer's subscriber station. Specifically, the schedule is generated "[u]nder control of the instructions of [the particular farmer's subscriber station's] particular set." (Spec. p. 551, l. 26.)

Claim 2 sets forth a step of "controlling said memory to communicate said mass medium program material to said output device in accordance with said schedule." The specification discloses causing the recorder/players 217 and 217A to play the recorded commercial spots. (Spec. p. 554, ll. 30-32.) The commercial spots are organized to play according to the schedule. (Spec. p. 554, ll. 7-11.) The farmer's station outputs the television information at television monitor 202M. (Spec. p. 539, ll. 1-5.)

Claim 2 sets forth "presenting said communicated mass medium program material at said output device." The specification discloses that the information of each

commercial spot is displayed. (Spec. p. 555, ll. 2-5.) As discussed above, the farmer's station displays television information at television monitor 202M. (Spec. p. 539, ll. 1.5.)

a. Claim 8

Claim 8 depends from claim 2. Claim 8 further sets forth that "said mass medium program material includes at least one of video and audio." The commercial spots are included in the "Farm Plans of Europe" combined medium television programming that includes video and audio. (Spec. p. 552, ll. 20-30.) Claim 8 sets forth that "said subscriber station further includes a switch operatively connected to said receiver." The farmer's receiver station includes a matrix switch 258 that is operatively connected to the converter box 222. (Spec. p. 391, ll. 21-35; p. 538, l. 34.)

Claim 8 includes the step of "receiving a signal from a remote station, said signal including said at least one of video and audio." The farmer's receiver station receives the transmission of a second television channel. (Spec. p. 553, ll. 16-18) The commercial spots including video and audio are transmitted on the second channel. (Spec. p. 553, ll. 23-29.)

Claim 8 includes the step of "controlling said switch to communicate said signal to one of said memory and said processor." Matrix switch 258 is controlled by signal processor 200. (Spec. p. 395, ll. 1-3.) Recorder/player 217 and microcomputer 205 receive their programming inputs from matrix switch 258. (Spec. p. 392, ll. 1-15.) Signal processor 200 causes the selected commercial spots to be communicated to recorder/players 217 and 217A and causes the program unit identification information of the signal to be communicated to microprocessor 205. (Spec. p. 553, l. 33 to p. 554, l. 11.)

b. Claim 10

Claim 10 depends from claim 2. Claim 10 further sets forth a step of "analyzing said subscriber data to value information included in said mass medium program

material.” The farmer’s crop planting plan is analyzed to identify the commercial spots of highest potential value to the farmer. (Spec. p. 551, ll. 26-30.)

Claim 10 sets forth a step of “selecting at least a portion of said mass medium programming based on said step of analyzing.” A portion (four) of the 26 commercial spots is selected based on analyzing the crop planting plan. (Spec. p. 551, ll. 28-29.)

Claim 10 sets forth a step of “communicating said selected portion of said mass medium program material to said memory.” The selected four commercial spots are communicated to the selected recorder/players 417 and 417A. (Spec. p. 553, l. 33 to p. 554, l. 3.)

c. Claim 11

Claim 11 depends from claim 2. Claim 11 further sets forth that “said instruct-to-generate signal designates a plurality of units of said mass medium program material.” The program instruction set designates four commercial spots. (Spec. p. 551, ll. 26-30.) Claim 11 also sets forth that “said memory includes a plurality of memory locations.” The recorder/players include both recorder/player 217 and recorder/player 217A. (Spec. p. 534, ll. 2-4.)

Claim 11 sets forth the step of “communicating selected portions of said mass medium programming material to at least one specific memory location of said plurality of memory locations.” The four commercial spots are recorded at a selected recorder/player. (Spec. p. 554, ll. 7-9.)

d. Claim 12

Claim 12 depends from claim 2. Claim 12 further sets forth that “said step of controlling said memory to communicate said mass medium program material is commenced in response to an output control signal.” The control of the recorder/players 417 and 417A to communicate the commercial spots is commenced in response to a second-cueing message. (Spec. p. 554, l. 22 to p. 555, l. 1.)

Claim 12 sets forth a step of “detecting said output control signal in an information transmission communicated from a remote transmitter station.” The second-cueing message is detected by signal processor 200 at the end of a prerecorded segment of the “Farm Plans of Europe” programming that is transmitted from an intermediate station. (Spec. p. 554, ll. 22-29.)

e. Claim 14

Claim 14 depends from claim 2. Claim 14 further sets forth a step of “storing a module at said subscriber station in response to said instruct-to-generate signal.” A module “TELEPHONE.EXE” is stored at a disk drive of the farmer’s subscriber station in response to the instructions of the program instruction set. (Spec. p. 554, ll. 12-16.)

Claim 14 also sets forth the step of “inputting to a remote station data of subscriber choice in accordance with said module, said data of subscriber choice communicating a response by said subscriber to a combined medium presentation including said communicated mass medium program material.” The farmer modifies his “PLANTING.DAT” file to suit his own choices. (Spec. p. 555, ll. 21-23.) The modified data is input to a remote data collection station by executing instructions of the “TELEPHONE.EXE” module. (Spec. p. 555, ll. 24-29.) The modified data communicates a response by the farmer to the “Farm Plans of Europe” presentation including the selected commercial spots. (Spec. p. 555, ll. 14-23.)

f. Claim 16

Claim 16 depends from claim 2. Claim 16 is amended to delete the unnecessary phrase “one of simultaneous or sequential.” Claim 16 as amended further sets forth that “said output device is capable of outputting television programming and said subscriber station presents at least a portion of said mass medium program material at said output device with said television programming.” Television monitor 202M is capable of outputting television programming such as segments of the “Farm Plans of Europe”

program. The farmer's subscriber station presents a portion of the commercial spots at the television monitor 202M with various segments of the "Farm Plans of Europe" program. (Spec. p. 554, l. 22 to p. 555, l. 1.)

Claim 16 sets forth a step of "receiving from one of a remote broadcast and a cablecast transmitter station an information transmission including channels of programming, said information transmission including said television programming and said instruct-to-generate signal." The television transmission system distributing the "Farm Plans of Europe" program includes both broadcast and cablecast transmitter stations. (Spec. p. 534, l. 27-31; p. 535, ll. 18-22.) The farmer's station has capacity to receive programming transmitted by both types of transmitter stations. (Spec. p. 536, ll. 2-10.) The "Farm Plans of Europe" is distributed in a transmission including channels of programming. (Spec. p. 553, ll. 16-18.) The transmission includes the segments of the "Farm Plans of Europe" program (Spec. p. 552, ll. 14-19) and the program instruction set (Spec. p. 548, ll. 1-4).

Claim 16 sets forth a step of "communicating said television programming from said receiver to said output device." The "Farm Plans of Europe" television programming is communicated from the receiver to the television monitor. (Spec. p. 538, l. 31 to p. 539 l. 5.)

Claim 16 sets forth a step of "detecting a plurality of instruct signal types in a code portion of said information transmission, said instruct-to-generate signal being of a first instruction type." The farmer's subscriber station detects SPAM messages that are a portion of the transmission of the "Farm Plans of Europe" program. The farmer's subscriber station receives instruct signals of different types, such as the message of the program instruction set (Spec. 548, ll. 1-6) and the cueing messages (Spec. p. 554, l. 22). The program instruction set is an instruction type.

Claim 16 sets forth a step of “communicating said instruct-to generate signal to said processor.” The program instruction set is communicated to microprocessor 205. (Spec. p. 548, ll. 1-4.)

Claim 16 set forth a step of “controlling said memory to store and output said mass medium program material based on one or more signals of a second instruct signal type.” The recorder/players 217 and 217A are controlled to store and output the commercial spots based on cueing signals. (Spec. p. 553, ll. 1-22; p. 554, ll. 22-30.)

2. Independent Claim 3

Claim 3 sets forth a “method of communicating subscriber station information from a subscriber station to at least one remote station.” Similar to claim 2 discussed above, the summary example at pages 533 *et seq.* of the specification discloses such a method. The summary example describes communicating a farmer’s modified crop planting plan from the farmer’s station to a remote data collection station. (Spec. p. 555, ll. 14-29.)

In the summary example, data regarding the specific farmer’s farm is stored at the farmer’s receiver station. A program instruction set is received with the “Farm Plans of Europe” combined medium program. The program instruction set is used to generate a schedule for playing a series of commercial spots related to the farmer’s crop planting plan. A crop planting plan for the farmer is generated by executing instructions of the program instruction set. The farmer inputs modifications to his plan in response to the “Farm Plans of Europe” program including the scheduled commercial spots. The farmer’s modifications are transferred to a remote data collection station.

Claim 3 sets forth a step of “storing subscriber data at a subscriber station.” The summary example describes farmers each of whom have a subscriber station. (Spec. p. 534, ll. 1-4.) The specification describes storing particular farm information of the

specific farm of each farmer on a disk of microprocessor 205 of the farmer's subscriber station. (Spec. p. 534, ll. 4-7.)

Claim 3 sets forth a step of "receiving at said subscriber station at least one instruct signal which is used to generate a schedule and output mass medium program material in accordance with said schedule." A program instruction set is received at the farmer's subscriber station. (Spec. p. 548, ll. 1-6.) The program instruction set is used to generate a schedule of commercial spots. (Spec. p. 551, l. 26 to p. 552, l. 7.) The commercial spots are output in accordance with the schedule. (Spec. p. 554, ll. 7-11.)

Claim 3 sets forth a step of "generating subscriber specific data, said generating at said subscriber station directed by instructions from said at least one instruct signal." A farmer's optimal crop planting plan is generated. (Spec. p. 548, ll. 18-22.) The generation of the crop planting plan is directed by instructions from the program instruction set. (Spec. p. 548, ll. 18-19.)

Claim 3 sets forth a step of "receiving one of a viewer's and a participant's response to a mass medium presentation at said subscriber station, said mass medium presentation including said mass medium program material." The farmer views the "Farm Plans of Europe" program and participates in the process of creating a European master agricultural plan. The farmer's subscriber station receives the farmer's response to the "Farm Plans of Europe" program. The response is the farmer's input to modify his crop planting data. (Spec. p. 555, ll. 14-29.) The "Farm Plans of Europe" program includes the selected commercial spots. (Spec. p. 555, ll. 14-17.)

Claim 3 sets forth a step of "transferring said subscriber specific data from said subscriber station to at least one remote station based on said step of receiving." The farmer's crop planting plan is transmitted via telephone from the farmer's subscriber station to a remote data collection station based on the farmer's input. (Spec. p. 555, ll. 21-29.)

a. Claim 18

Claim 18 depends from claim 3. Claim 18 is amended to introduce a remote site to which the meter or monitor information is communicated.

Claim 18 further sets forth a step of “storing a software module at said subscriber station.” A software module (“PROPRIET.MOD”) is stored at the farmer’s subscriber station. (Spec. p. 534, ll. 14-16.)

Claim 18 sets forth a step of “executing said software module in response to said at least one instruct signal.” The “PROPRIET.MOD” software module is executed in response to the program instruction set. (Spec. p. 548, ll. 18-34.)

Claim 18 sets forth a step of “accessing said stored subscriber data under control of said software module.” The “PROPRIET.MOD” software module analyzes the crop planting plan by accessing the particular farmer’s data (stored in the “MY_FARM.DAT” file). (Spec. p. 548, ll. 23-34.)

Claim 18 as amended sets forth a step of “storing at least one of meter information and monitor information evidencing processing of said software module, said at least one of meter information and said monitor information is communicated to a remote site.” Metering (and monitoring information) is retained that evidences decryption of the “PROPRIET.MOD” software module. (Spec. p. 549, ll. 4-8.) The signal processing system disclosed is designed for meter and monitor information to be communicated to a remote billing agencies (Spec. p. 88, l. 32 to p. 89, l. 2) such as the proprietary service companies who provide the “PROPRIET.MOD” modules. (Spec. p. 548, ll. 30-34.)

3. Independent Claim 7

Claim 7 is amended to properly introduce the remote station referred to in the fifth recited step of the claim.

Claim 7 sets forth a “method of communicating subscriber station information from a subscriber station to at least one remote station.” Similar to claim 2 discussed

above, the summary example at pages 533 *et seq.* of the specification discloses such a method. The summary example describes communicating a farmer's modified crop planting plan from the farmer's station to a remote data collection station. (Spec. p. 555, ll. 14-29.)

In the summary example, the specification describes an iterative process in which national and local planners provide data to the farmers in Europe. Using this data, an optimized crop planting plan is presented to each farmer. The farmers modify their particular plans as they see fit. The data from the farmers' modified plans are aggregated and used by the national and local planners to provide revised data to the farmers. This cycle is repeated several times until a satisfactory European master agricultural plan is achieved. During the first cycle, a crop planting plan specific to a particular farmer is explained to the farmer. Offers are made in the form of commercial spots for goods and services. The farmer modifies his plan in response to the presentation including the commercials. The farmer's modified plan is communicated to a remote site. During the second cycle a message including a program instruction set is generated and assembled. The program instruction set operates to generate a schedule of the commercials to be shown. The second presentation is delivered based on the program instruction set.

Claim 7 sets forth a "method for information delivery for use with an interactive image output apparatus, said interactive image output apparatus having at least one output device for outputting said information and an input device for receiving input from a subscriber." The specification describes a method for delivering the "Farm Plans of Europe" program for use with a farmer's subscriber station. (Spec. p. 541, ll. 5-11.) The farmer's subscriber station has a television monitor 202M. (Spec. p. 539, ll. 1-3.) The farmer's subscriber station has a local input 225 for receiving input from the farmer. (Spec. p. 555, ll. 21-22.).

Claim 7 sets forth a step of "outputting a presentation that explains at least one receiver specific datum, said presentation including a first sequence of images."

Segments of the "Farm Plan of Europe" program presentation are output at the farmer's subscriber station. (Spec. p. 552, ll. 14-30.) The presentation explains the crop planting plan that is specific to the farmer's receiver. (Spec. p. 552, ll. 26-30.) The presentation includes displaying applicable television picture images. (Spec. p. 552, ll. 20-24.)

Claim 7 sets forth a step of "making an offer during said step of outputting with respect to said information." Commercial spots are output during the presentation of the "Farm Plans of Europe" program. (Spec. p. 554, l. 22 to p. 555, l. 1.) The commercial spots are offers of goods and services. (Spec. p. 535, l. 32 to p. 536, l. 2.)

Claim 7 sets forth a step of "receiving input from said subscriber at said input device in response to said offer, said interactive image output apparatus having a transmitter for communicating data to a remote site." Input of the farmer's modified planting plan is received at local input 225. (Spec. p. 555, ll. 21-23.) The farmer modifies his planting plan in response to the "Farm Plans of Europe" program including the commercial spots. (Spec. p. 555, ll. 14-19.) The farmer's subscriber station includes, in signal processor 200, an auto dialer 24 and telephone connection 22 as shown in Figure 2 for communicating data to a remote site. (Spec. p. 33, ll. 11-12; p. 555, ll. 26-29.)

Claim 7 sets forth a step of "communicating said data to said remote site, said interactive mass medium output apparatus and said remote site comprising a network having a plurality of transmitter stations." The modified planting plan is communicated to a remote data collection station. (Spec. p. 555, ll. 25-29.) The network that distributes the "Farm Plans of Europe" program includes the farmer's subscriber station, the remote data collection station, and various transmitter stations, such as intermediate transmitter stations for each local government. (Spec. p. 535, ll. 18-22.)

Claim 7 as amended sets forth a step of "one of generating and assembling, in said network, at least one message which operates at said interactive image output apparatus to generate a schedule and to output a second sequence of images in accordance with said schedule, said interactive image output apparatus having a receiver for receiving a signal

from a remote station.” During a second cycle of the “Farm Plans of Europe” program, instruction sets are again transmitted to the farmer’s subscriber station. In the network, specifically at computer 73 of each local intermediate station, specific program instruction sets are assembled and generated. (Spec. p. 545, ll. 11-28.) The program instruction set operates at the farmer’s subscriber station to generate a schedule of commercial spots. (Spec. p. 551, ll. 26-30.) The commercial spots of the “Farm Plans of Europe” program are output in accordance with the schedule. (Spec. p. 554, ll. 7-11.) The farmer’s subscriber station includes a receiver such as satellite earth station 250 to receive a signal from a remote station. (Spec. p. 538, l. 31 to p. 539, l. 19.)

Claim 7 sets forth a step of “delivering said information to said at least one output device based on said at least one message.” Segments of the “Farm Plans of Europe” program, such as the commercial spots, are output based on the program instruction set. (Spec. p. 552, ll. 20-24.) Television output information is output at television monitor 202M. (Spec. p. 539, ll. 1-3.)

4. Independent Claim 26

Claim 26, like claim 2, sets forth a method of controlling the outputting of mass medium program materials at a subscriber station. The general support for claim 26 is found in the summary example which supports claim 2 as discussed above.

Claim 26 sets forth “a method of controlling the outputting of mass medium program materials at a subscriber station in a broadcast or cablecast distribution system.” In the summary example of the specification, the output of the program “Farm Plans of Europe” is controlled. (Spec. p. 552, ll. 14-30.) The distribution system for the program includes both broadcast and cablecast transmitters. (Spec. p. 534, l. 27-31; p. 535, ll. 18-22.) Each farmer has a subscriber station for receiving the program. (Spec. p. 536, ll. 2-10.)

Claim 26 sets forth "said broadcast or cablecast distribution system having a transmitter station and one or more subscriber stations including a receiver, a processor, and an output device." The distribution system includes transmitter stations such as local intermediate transmitter stations. (Spec. p. 535, ll. 18-22.) The farmer's subscriber stations include various receivers such as tuners 215 and 215A. The farmer's subscriber stations include processors such a microcomputer 205. The farmer's subscriber stations include various output devices such as TV monitor 202M.

Claim 26 sets forth "said broadcast or cablecast distribution system having a computer for storing data and controlling communication of mass medium program materials." The distribution system includes various computers such a microcomputer 205 in which data is stored to control the communication of the program. (Spec. p. 537, ll. 10-17.)

Claim 26 sets forth a step of "storing mass medium program material and a subscriber datum, said subscriber datum designating a subject of interest to a subscriber." Selected commercial spots are stored at selected recorder/player 217 or 217A. (Spec. p. 553, l. 33 to p. 554, l. 11.) Data of the particular farmer's farm is also stored. (Spec. p. 534, ll. 4-7.) The farmer's crop planting plan designates the particular farm of interest to the farmer.

Claim 26 sets forth a "step of detecting a control signal, said control signal designating a unit of mass medium program material." A first SPAM message including a program instruction set is detected. (Spec. p. 548, ll. 1-4.) The set designates potential commercial spots to be shown in the "Farm Plans of Europe" program. (Spec. p. 551, ll. 18-20.)

Claim 26 sets forth a step of "selecting said subscriber datum in response to said control signal." The farmer's farm data is accessed in response to the program instruction set. (Spec. p. 548, ll. 23-27.)

Claim 26 sets forth a step of “generating at least some of a schedule by processing said selected subscriber datum in response to said control signal, said generated at least some of a schedule including at least one of the group of: (1) a time to communicate said designated unit of mass medium program material; (2) a device from which to communicate said designated unit of mass medium program material; and (3) a device to which to communicate said designated unit of mass medium program material.” In response to the program instruction set the farmer’s data is processed to select four commercial spots to be shown. (Spec. p. 551, ll. 26-33.) The result is a schedule of the selected commercial spots that identifies the relative times that the four commercials spots are to be played. (Spec. p. 554, ll. 7-11.) The recorder/players 217 or 217A, to which the commercial spots are 1) communicated to for storing and 2) communicated from for playing, are also selected. *Id.*

Claim 26 sets forth a step of “communicating said designated unit of mass medium program material at said one or more subscriber stations under processor control based on said schedule.” The selected commercial spots are communicated at the farmer’s subscriber station under processor control based on the schedule. (Spec. p. 554, ll. 7-11.)

Claim 26 sets forth a step of “outputting said communicated unit of mass medium program material at said one of more subscriber stations.” The commercial spots are displayed. (Spec. p. 555, ll. 2-5.)

a. Claim 27

Claim 27 depends from claim 26. Claim 27 further sets forth that “said unit of designated mass medium program material includes at least one of video and audio.” The designated commercial spots are included in the “Farm Plans of Europe” combined medium television program that includes video and audio. (Spec. p. 552, ll. 20-30.)

Claim 27 sets forth a step of “tuning the receiver at said subscriber station to receive said at least one of video and audio.” The receiver at the farmer’s subscriber station is tuned to a second television channel to receive the commercial spot programming. (Spec. p. 553, ll. 11-32.)

Claim 27 sets forth a step of “controlling a selective transmission device at said subscriber station to communicate said at least one of video and audio to the output device at said subscriber station.” A matrix switch 258 communicates program material to the television monitor. (Spec. p. 392, ll. 16-22.) Signal processor 200 controls the communication of the commercial spots. (Spec. p. 553, l. 33 to p. 554, l. 11.)

b. Claim 28

Claim 28 depends from claim 26. Claim 28 further sets forth that “an information transmission including said mass medium program material includes a second control signal.” The information transmission of the “Farm Plans of Europe” program which includes the commercial spots also includes additional SPAM information that controls the farmer’s station. (Spec. p. 553, ll. 11-14.)

Claim 28 sets forth that the step of communicating includes “outputting at at least one of the receiver and a first memory at said subscriber station to at least one of the output device at said subscriber station and a second memory based on said second control signal.” The commercial spots from tuner 215A are communicated to first and second recorder/players 217 and 217A. (Spec. p. 553, ll. 18-22.) The recorder/players are controlled to organize the commercial spots. (Spec. p. 553, l. 33 to p. 554, l. 3.) This organization may include transferring a commercial spot from one recorder to another. (Spec. p. 332, ll. 27-29.) The commercials are ultimately played from recorder/players 217 and 217A to be displayed by the television monitor. (Spec. p. 554, ll. 7-11.)

c. Claim 29

Claim 29 depends from claim 26. Claim 29 further sets forth that “the step of communicating said designated unit of mass medium program material under processor control includes controlling a storage device at said subscriber station to play said designated unit of mass medium program material according to said schedule.” The commercial spot is communicated under control of signal processor 200 by playing the selected recorder/player 217 or 217A according to the schedule. (Spec. p. 554, ll. 7-11.)

Claim 29 sets forth a step of “tuning a receiver in said broadcast or cablecast distribution system to receive said designated unit of mass medium program material.” A receiver in the farmer’s subscriber station is tuned to receive the commercial spot programming. (Spec. p. 553, ll. 11-32.)

Claim 29 sets forth a step of “communicating said designated unit of mass medium program material to a specific memory location in said broadcast or cablecast distribution system.” The selected commercial spots are communicated to selected recorder/players 217 or 217A. (Spec. p. 554, ll. 8-9.)

Claim 29 sets forth a step of “controlling said storage device to store said designated unit of mass medium program material.” Signal processor 200 controls the recorder/player 217 or 217A to record the selected commercial spot. (Spec. p. 554, ll. 7-11.)

d. Claim 30

Claim 30 depends from claim 26. Claim 30 further sets forth that “said subscriber station includes at least one of (1) a plurality of storage devices and (2) a plurality of memory locations.” The farmer’s subscriber station includes multiple recorder/players 217 and 217A which have multiple locations for storing program material. (Spec. p. 534, ll. 2-4.)

Claim 30 sets forth that “said step of communicating includes organizing programming stored at said subscriber station to play according to said schedule, said

programming including said designated unit of mass medium program material.” The selected commercial spot is recorded and then organized to play according to the schedule. (Spec. p. 553, l. 33 to p. 554, l. 11.)

e. Claim 33

Claim 33 depends from claim 26. Claim 33 further sets forth that “said stored subscriber datum is at least part of a subscriber budget, analysis, recommended plan or solution to a problem.” The data of the farmer’s plan is used as part of a crop planting plan that includes a budget. (Spec. p. 550, ll. 30-35.) The crop planting plan is an analysis of the farmer’s data. The crop planting plan is a recommend plan for planting the farmer’s farm. The crop planting plan is a solution to the problem of optimizing the return of the farm.

Claim 33 sets forth the step of “analyzing said stored subscriber datum to value information received in said broadcast or cablecast distribution system.” The farmer’s crop planting plan is analyzed to identify the received potential commercial spots of highest potential value to the farmer. (Spec. p. 551, ll. 26-30.)

Claim 33 sets forth the step of “selecting said designated unit of mass medium program material based on said step of analyzing.” The designated commercial spots are selected based on the analysis. (Spec. p. 551, ll. 28-29.)

f. Claim 36

Claim 36 depends from claim 26. Claim 36 further sets forth a step of “storing a module at said subscriber station in response to said control signal.” A module “TELEPHONE.EXE” is stored at a disk drive of the farmer’s subscriber station in response to the instructions of the program instruction sets. (Spec. p. 554, ll. 12-16.)

Claim 36 sets forth a step of “communicating one or more data of subscriber choice to a remote station in accordance with said module, said one or more data of subscriber choice input by said subscriber in response to a combined medium

programming presentation which includes said designated unit of mass medium program material.” The farmer modifies his “PLANTING.DAT” file to suit his own choices. (Spec. p. 555, ll. 21-23.) The modified data is communicated to a remote data collection station in accordance with the “TELEPHONE.EXE” module. (Spec. p. 555, ll. 24-29.) The farmer inputs his modifications in response to the presentation of the “Farm Plans of Europe” program including the selected commercial spots. (Spec. p. 555, ll. 14-23.)

B. Response To Drawing Objections

In section I of the Office Action, the drawings are objected to under 37 C.F.R. § 1.83(a). The pending claims are directed to methods. Applicants respectfully submit that the drawings do illustrate the structure and structural relationships between the components that perform the claimed methods. Drawings are required only “where necessary for the understanding of the subject matter sought to be patented.” 35 U.S.C. § 113. The Office Action asserts that various steps of the claimed methods are not shown in the drawings. For example, the Office Action highlights the storing, receiving, generating and transferring steps of claim 3 as elements not shown in the drawings. Applicants respectfully submit that drawings are not necessary for the understanding of the steps of a method such as recited in claim 3. The Office recognizes that drawings are not necessary for the understating of a process or method. “It has been USPTO practice to treat an application that contains at least one process or method claim as an application for which a drawing is not necessary for an understanding of the invention under 35 U.S.C. 113 (first sentence).” M.P.E.P. § 601.01(f) (8th Ed. Rev. 2, 2004). The Office Action asserts that features, such as the steps of claim 3, must be shown or canceled from the claims. Applicants submit that steps of method claims for which a drawing is not necessary for an understanding of the claimed invention are properly included in the claims without express reference in the drawings. It is unreasonable to require features to be canceled from the claims for lack of illustration, when drawings are not required to

show such features. Applicants note that the method of claim 3 is fully described in the specification as set forth above. The apparatus performing the method is illustrated in the drawings.

In is unclear what the Examiner requires to be included in the drawings. Applicants have fully set forth the support for each claim limitation in Section A above. Where specific structure is set forth in the preamble of the claims or where steps or substeps of the claimed methods are recited as performed in relation to specific structure, the support identifies the structure by the reference numeral used in the drawings. Applicants respectfully assert that the structure referred to in the claims is sufficiently illustrated in the drawings to provide an understanding of the invention.

The Office Action asserts: “no embodiment appears to be shown in its entirety in any of the drawings, and therefore the structural relationships between the elements as recited in the claims are not shown in the drawings.” If this statement was meant to suggest that a single drawing must illustrate an entire embodiment, the Office Action cites to no authority that a claimed embodiment must be specifically illustrated in a single drawing. If this statement was intended to mean that the drawings do not depict an embodiment that performs the claimed methods, it is incorrect. As discussed in Section A above, and further below, Figures 7 and 7A-F fully depict the apparatus that performs the claimed methods.

The Office Action asserts that the structural relationships between elements as recited in the claims are not shown in the drawings. The Office Action asserts that the drawings do not show certain highlighted elements and corresponding structural interactions. However, the Office Action identifies structural relationships that are allegedly absent from the drawings only with respect to claims 2 and 8. The bulk of the claim language highlighted by the Office Action refers to actions and functional relationships rather than structure and structural relationships. Applicants respectfully submit that the drawings are not the appropriate medium for describing the highlighted

method steps and functional relationships. These steps and functional relationships are fully described in the specification with appropriate references to the structure illustrated in the drawings.

Applicants respectfully submit that the structural relationships between the recited structural elements are fully illustrated in the drawings. For example, Figure 7 of the drawings shows matrix switch 258 that couples the signal output of various receivers (e.g. converter box 222) as the input to a processor (microcomputer 205) and operatively connects a memory (recorder/player 217) to an output device (TV set 202) as set forth in claim 2. Similarly, Figure 7 illustrates matrix switch 259 that operatively connects an output of the processor (microcomputer 205) to a control input of the memory (recorder/player 217) as set forth in claim 2. The matrix switch 258 is operatively connected to the receivers such as converter box 222 as set forth in claim 8. Applicants request that any other structural relationships recited in the claims that the Examiner does not find in the drawings be identified.

For the above, reasons applicants respectfully submit that the claim limitations are appropriately supported by the drawings. Applicants respectfully request that objections to the drawings be withdrawn.

C. Response To Written Description Rejections

In section II of the Office Action, each of the pending claims is rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Section III of the Office Action also rejects each of the pending claims under 35 U.S.C. § 112, first paragraph, as containing new matter and as containing subject matter which was not described in the specification in such a way to reasonably convey to one skilled in the relevant art that the inventors, at the time the invention was filed, had possession of

the claimed invention. The Examiner purports to follow the "Guidelines for Examination of Patent Applications Under the 35 U.S.C. § 112, first paragraph, 'Written Description' Requirement" in Section III. However, the guidelines are not separate requirements under which a claim may be rejected. To the contrary, "[t]he Guidelines do not constitute substantive rulemaking and hence do not have the force and effect of law." M.P.E.P. § 2163. Accordingly, applicants address the rejections of Sections II and III together and request that all rejections based on the written description requirement of § 112 be withdrawn for the reasons set forth below. Section III further includes many assertions regarding the enablement requirement of § 112. As Section IV is largely identical to Section III and purports to address the enablement requirements, such assertions are addressed in Section D below.

Applicants respectfully submit that the Overview Of The Claims above identifies the written description in the specification of the claimed subject matter. As the claims are fully supported by the specification, applicants respectfully request the withdrawal of the rejections under the written description requirement of the first paragraph of § 112.

In Section II, the Office Action highlights various terms and phases the Examiner asserts "do not find clear support or antecedent in the descriptive portion of the specification." There is absolutely no analysis of, reference to, or discussion of any of the teachings found in applicants' specification that disclose the claimed methods. In Section III of the Office Action, certain claim terms are called out specifically. However for most of the recited terms, Section III again merely asserts, without analysis, that the terms are not supported by the specification. Because the Examiner has failed to provide any reason or analysis as to *why* applicants' claims are not sufficiently supported under 35 U.S.C. § 112, first paragraph, the Examiner has failed to meet his burden to sustain a rejection.

An Examiner has the initial burden of presenting a prima facie case of unpatentability by:

“[P]resenting evidence or reasons why persons skilled in the art would not recognize in the disclosure a description of the invention defined by the claims.” . . . [T]he burden placed on the examiner varies, depending on what the applicant claims. If the applicant claims embodiments of the invention that are completely outside the scope of the specification, then the examiner or Board need only establish this fact to make out a prima facie case. If, on the other hand, the specification contains a description of the claimed invention, albeit not *in ipsius verbis* (in the identical words), then the examiner or Board, in order to meet the burden of proof, must provide reasons why one of ordinary skill in the art would not consider the description sufficient. Once the examiner or Board carries the burden of making out a prima facie case of unpatentability, “the burden of coming forward with evidence shifts to the applicant.” . . . [to] show that the invention is adequately described to one skilled in the art.

In re Alton, 76 F.3d 1168, 1175 (Fed. Cir. 1996) (citations omitted).

As the *Alton* case makes clear, the Examiner’s burden varies in making a valid rejection under § 112, first paragraph. In the Office Action, the Examiner has not even met the most lenient burden described in *Alton*. The Examiner does not assert that applicants’ claims or specific limitations in applicants’ claims are completely outside the scope of the specification. To the contrary, the Examiner merely highlights claim language deemed to be unsupported without offering *reasons* why one of ordinary skill would not consider the written description sufficient. Regardless, the detailed discussion of specification support in Section A above, with numerous citations to the specification and drawings, demonstrates that the language highlighted by the Examiner is fully supported.

In the few instances in Section III where a claim term is not summarily dismissed as lacking support in the specification, the reasoning in the Office Action is contrary to law. For example, at page 17 and 22, the Office Action addresses the claim terms “subscriber data” and “subscriber datum.” The Office Action acknowledges that the

specification addresses “user specific data.” However, the Office Action asserts that the term “subscriber data” “simply [does] not exist in the specification.” Accordingly, the Office Action concludes that one of ordinary skill would not know the applicants’ intention as to what is meant by the term “subscriber data.” This reasoning is incorrect for at least two reasons. First, “the claims must be interpreted as broadly as their terms reasonably allow. This means that the words of the claim must be given their plain meaning unless applicant has provided a clear definition in the specification.” M.P.E.P. § 2111.01 (citations omitted). Second, “*ipsis verbis* disclosure is not necessary to satisfy the written description requirement of section 112. Instead, the disclosure need only reasonably convey to persons skilled in the art that the inventor had possession of the subject matter in question.” *Fujikawa v. Wattanasin*, 93 F3d 1559, 39 USPQ2d 1895, 1904 (Fed. Cir. 1996). One of ordinary skill need not find a claim term in the specification in order to know what the claim means. Accordingly, applicants respectfully request that all rejections based on the alleged absence of *ipsis verbis* disclosure of a claim term be withdrawn.

The Office Action, at pages 26-30, notes that the claims recite various interconnections and interrelations by using phrases such as “controlling,” “communicating with,” “in accordance with,” “in response to,” “based on,” and “according to.” The Office Action asserts that the specification does not support the claimed interconnections of elements and does not support the claimed interrelations between elements. Again, the Office Action provides no analysis or discussion of the specification to support this assertion. In any event, the specification does support the claimed interrelations and interconnections as demonstrated in Section A above.

Notwithstanding the Examiner’s failure to meet his burden for making a proper rejection of applicants’ pending claims under § 112, first paragraph, applicants have identified in Section A above detailed support for each and every limitation of the pending claims. Applicants respectfully submit that the illustrative support identified

above demonstrates that the claimed subject matter is described in the specification in such a way as to reasonably convey to one skilled in the art that applicants had possession of the claimed inventions at the time the application was filed. Applicants submit that the support provided demonstrates the details required to show that one of ordinary skill would find a description of the claimed invention in the specification. Applicants note that the support provided is illustrative, and that the claims may be supported by additional teachings of the specification. Applicants also wish to note that the claims of the instant application should not be construed to be limited based on the support provided.

D. Response To Enablement Rejection

Section IV of the Office Action rejects each pending claim under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way to enable one skilled in the art to which it pertains, or with which it most nearly connected, to make and/or use the invention. Sections III and IV are largely identical. Accordingly, the assertions directed to the written description requirement in Section IV have been addressed in Section C above.

Applicants respectfully submit that the Overview Of The Claims above identifies the written description in the specification of the claimed subject matter. As the claims are fully supported by the specification, applicants respectfully request the withdrawal of the rejections under the enablement requirement of the first paragraph of § 112.

“When rejecting a claim under the enablement requirement of section 112, the PTO bears an initial burden of setting forth a reasonable explanation as to why it believes that the scope of protection provided by that claim is not adequately enabled by the description of the invention provided in the specification of the application; this includes, of course, providing sufficient reasons for doubting any assertions in the specification as to the scope of enablement.” *In re Wright*, 999 F.2d 1557, 27 U.S.P.Q.2d 1510, 1513

(Fed. Cir. 1993). The Office Action fails to meet this burden. The Office Action merely asserts that the claims are not adequately enabled. The Office Action provides no reasonable explanation as to why the Examiner believes that the claims are not adequately enabled.

At page 38 of the Office Action, in language identical to the written description rejection, the Office Action asserts that the terms “subscriber data” and “designating a subject of interest of a subscriber” are not in the specification. For the reasons set forth above with regard to the written description requirement, applicants submit that the claimed invention need not be described using exact terms used in the specification. As explained in Section A above, the specification describes a crop planting plan for a farmer, which designates subjects of interest to the farmer. The specification does disclose how to make and use the claimed method in which the crop planting plan is stored and processed. The specification discloses how the crop planting plan is used to generate a schedule of commercial spots. Accordingly, the specification does disclose the details regarding the crop planting plan needed to understand how to make and use the claimed invention. The specification recites the functional interrelations between the crop planting plan and other elements in a manner that enables one of ordinary skill in the art to make and use the claimed method. Accordingly, no experimentation is required by one of ordinary skill in the art to make or use the claimed invention. The support in Section A above for each claim limitation demonstrates that one skilled in the art could make or use the claimed invention from the disclosure in the specification.

At page 51 of the Office Action, it is asserted: “The originally filed specification does not disclose the coupling of the claimed elements to one another, nor does it disclose how these elements are ‘controlling’ or ‘communicating with’ one another.” Applicants submit that the support set forth in Section A above demonstrates that the couplings and functional relationships between claim limitations are shown in the specification. The Office Action does not provide a reasonable explanation as to why the specification does

not show these relationships. The Office Action further asserts: "Even if the specification did recite that the claimed elements were connected to one another (which it does not), it would still not be enabling as it must disclose how the elements are connected to one another." There is no support for this assertion. The schematic diagrams illustrating how the components of the receiver stations are connected of Figures 7 and 7A-7F are the very type of diagrams one of skill in the art would rely upon to replicate the apparatus that performs the claimed methods. No further detail is required in the drawings to enable one of ordinary skill to make or use the claimed subject matter. The Office Action at page 33 notes: "The test of enablement is whether one skilled in the art could make or use the claimed invention from the disclosures in the patent coupled with information known in the art without undue experimentation." Accordingly, details needed to make or use the invention that are within the knowledge of one of ordinary skill in the art need not be disclosed in the specification.

The Office Action, at page 52, notes the use of the term "may" in the specification. The Examiner asserts that such terminology is merely an invitation to experiment. The Examiner is incorrect. First, the Examiner appears to overlook a basic feature of the disclosed invention. The disclosure describes systems and methods in which different personalized media content is generated and output at different receiver stations. Accordingly, various methods and systems may or may not have effect at different receiver stations in the same embodiment depending on the configuration of data stored at different receiver station. Explicit disclosure of such a system in which many different events may or may not occur at various different receiver stations is not an invitation to experiment. Second, there are various alternate embodiments fully disclosed in the specification. The mere inclusion of different embodiments in the specification does not render any particular embodiment non-enabled. Moreover, the Examiner has failed to cite any authority that justifies a rejection based on the enablement

requirement of §112, first paragraph, based on applicants' use of the word "may" in the specification.

The Office Action does not set forth a *prima facie* case that the specification does not enable the claimed subject matter. For at least the reasons set forth above, applicants respectfully request that all rejections of the claims based on the enablement requirement of the first paragraph of § 112 be withdrawn.

E. Response To Prior Art Rejections

a. Rejection Based On Gomersall

In Section V of the Office Action, claims 3 and 18 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 4,630,108 issued to Earl R. Gomersall (Gomersall). Applicants respectfully submit that Gomersall does not teach each limitation of claim 3 or 18.

Claim 3, as discussed above, is directed to a method of communication in which an instruct signal is received at a subscriber station. The instruct signal is "used to generate a schedule and to output mass medium program material in accordance with said schedule." Instructions from the instruct signal direct the generation of subscriber specific data. Gomersall does not teach such an instruct signal. Gomersall describes that a remote command and control "computer 12 transmits an individually organized substitute programming schedule to the [household] computer 64 which may include the approximate timing of the scheduled events." (Gomersall col. 9, ll. 19-22.) Accordingly, the schedule is not generated at the household receiving apparatus. No instruct signal is used to generate a schedule. To the contrary, the transmission of Gomersall includes the schedule. Furthermore, no subscriber specific data is generated under direction of instructions from an instruct signal. The Office Action does not identify any subscriber specific data generated in Gomersall. Although Gomersall describes the input of various household data for market research at the household receiving apparatus, none of the

market research data is generated under direction of an instruct signal as set forth by claim 3.

The Office Action does not establish a *prima facie* case of anticipation against claim 3. The Office Action does not establish that Gomersall teaches “at least one instruct signal which is used to generate a schedule” as set forth in claim 3. Accordingly, the Office Action does not establish that Gomersall teaches the claimed steps of “receiving at said subscriber station at least one instruct signal” and “generating subscriber specific data, said generating directed by instructions from said at least one instruct signal.”

Applicants submitted similar arguments in their response filed August 3, 1998 to the prior Office Action. The Office Action at page 61 purports to address these arguments by merely repeating the rejection. The Office Action does not explain how an instruct signal is used to generate a schedule. The Office Action does not identify instructions from the instruct signal that direct the generation of subscriber specific data.

Claim 18 depends from claim 3. The Office Action does not address the steps set forth by claim 18. Accordingly, the Office Action fails to establish a *prima facie* case of anticipation against claim 18. The Office Action merely asserts “that CPU (66) of Gomersall at least inherently controlled all of the above listed operations of the subscriber station via locally stored software.” It is not clear to what listed operations the Office Action refers as the steps of claim 18 are not listed in the Office Action. Notwithstanding, Gomersall does not teach storing meter information or monitor information evidencing the processing of any software module as set forth by claim 18.

Applicants respectfully submit that Gomersall does not anticipate claims 3 or 18 as the reference does not teach each limitation of the claimed invention. Applicants request that the rejection of claims 3 and 18 under 35 U.S.C. § 102(e) be withdrawn for at least this reason.

b. Rejection Based On Wine

Claims 2 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.K. published Patent Application 2 140 963 naming as inventor Charles Martin Wine (Wine). Wine does not show or suggest each limitation of claims 2 and 11.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. M.P.E.P. § 2143.03. The Office Action acknowledges that Wine does not show or suggest a schedule as recited in claim 2. Accordingly, Wine does not render claim 2 obvious. The Office Action does not suggest an obvious modification of Wine necessary to arrive at applicants' claimed invention. Rather the Examiner asserts that the "dancing routine" described by Wine represents a schedule. This assertion is insufficient to render claim 2 obvious. The Office Action does not establish that a schedule is taught or suggested by the prior art.

Wine describes an interactive video system wherein the displayed subject matter and its sequence are chosen by the viewer. (Wine p. 1, 11-13.) To provide interactive video, a "pickup stylus traces a path across the surface of disc 12 in accordance with the instructions provided by a user input from an interactive remote control 31 and digital auxiliary information (DAXI) recorded along with the picture signal information. In other words, the stylus is kicked in a 'dancing' routine so that the video sequence recovered from the disc and displayed on receiver 20 is the sequence selected by the user." (Wine p. 2, ll. 50-59.) The "dancing" routine of the stylus of Wine is not performed in accordance with a generated schedule. The DAXI includes eight bits to perform the stylus dancing. (Wine p. 4, ll. 121-123). Four bits identify the track. (Wine p. 4, ll. 123-124). Four bits identify the displacement of the stylus in the "dancing" routine. (Wine p. 4, l. 130 to p. 5, l. 2.)

The dancing routine for any particular viewer choice is predetermined and represented by the DAXI. Claim 2 sets forth generating a schedule by processing subscriber data. The Office Action relies on the DAXI of Wine to show subscriber data.

No schedule is generated by processing the DAXI. To the contrary, the predetermined “dancing” routine for the particular viewer choice is simply read from the DAXI. Wine does not show or suggest generating a schedule.

Applicants argued that the “dancing” routine of Wine is not a schedule in their response filed August 3, 1998 to the prior Office Action. The Office Action at page 62 purports to address applicants’ arguments by merely repeating the rejection. The Office Action is silent regarding applicants’ arguments that Wine does not suggest generating a schedule.

Claim 11 depends from claim 2 and is thus patentable over Wine for the reasons set forth above. Additionally, claim 11 sets forth “communicating selected portions of said mass medium program material to at least one specific memory location of said plurality of memory locations.” The Office Action asserts that the program segments have been stored at specific memory location of the video disc of Wine. Wine, however, does not show or suggest communicating selected program segments to specific locations of the video disc. Wine, therefore, fails to show or suggest the communicating step of claim 11.

Applicants respectfully submit that the Office Action does not establish a *prima facie* case of obviousness against claims 2 and 11 based on Wine. For at least this reason, applicants request that the rejections of claims 2 and 11 as being unpatentable over Wine be withdrawn.

c. Rejections Based On Yamaguchi

Claims 2, 8, 10, 11, 12 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 4,742,516 issued to Mikio Yamaguchi (Yamaguchi). Yamaguchi does not show or suggest each limitation of claims 2, 8, 10, 11, 12, and 14.

The Office Action acknowledges that Yamaguchi does not show or suggest a step of generating a schedule as recited in claim 2. Accordingly, Yamaguchi does not render

claim 2 obvious. The Office Action does not suggest an obvious modification of Yamaguchi necessary to arrive at applicants' claimed invention. Rather the Examiner asserts that the Yamaguchi must have included a process that corresponds to the claimed step of generating a schedule. This assertion is insufficient to render claim 2 obvious.

Yamaguchi describes a system for transmitting information in a series of packets, each including text and a classification code. Each receiver stores in an accumulator only packets with selected classification codes. In one embodiment of the Yamaguchi system, upon a command for information of a particular classification code, "a scanning device (37) reads out only text with the designated code." (Yamaguchi col. 10, ll. 11-12.)

The Office Action asserts that the scanning device (37) of Yamaguchi must have included means to have allowed the scanning device (37) to have changed the order in which the memory locations of memory (36) were accessed. This assertion is incorrect. The scanning device (37) need not change any order of access, but rather may simply scan the memory for classification codes that match the classification code of the desired output.

The Office Action asserts that the process of changing the order of accessing memory locations corresponds to the recited step of generating a schedule. However, as Yamaguchi suggests no process of changing the order for accessing memory locations, Yamaguchi does not show or suggest a generating a schedule.

Applicants argued that the Yamaguchi is silent as to any generated schedule in their response filed August 3, 1998 to the prior Office Action. The Office Action at page 63 addresses applicants' arguments by repeating the rejection. The Office Action asserts that to read the text information out the memory of accumulator (36) in succession, the Yamaguchi device must have been supplied with "memory access information" to have identified the order in which memory location are accessed. Yamaguchi suggests no "memory access information." The Office Action identifies no suggestion in the prior art of "memory access information." The Office Action asserts that "memory access

information,” by definition, represents a display or output schedule. The Office Action is incorrect. No order need be specified to output the text message in succession. Thus, any “memory access information” need not represent a schedule.

Claims 8, 10, 11, 12 and 14 depend from claim 2 and are thus patentable over Yamaguchi for at least the reasons set forth above. Additionally, claim 14 sets forth storing a module in response to the instruct-to-generate signal. The Office Action asserts that classification codes input by the user show a module. However, the Office Action has asserted that these classification codes show subscriber data. Notwithstanding, the module is stored in response to an instruct-to-generate signal. The Office Action relies on the command to output information in Yamaguchi to show an instruct-to-generate signal. The classification codes of Yamaguchi are not stored in response to the command to output. Claim 14 further sets forth data of subscriber choice that communicate a response by the subscriber to a combined medium presentation. Yamaguchi does not show or suggest such data of subscriber choice. The Office Action is silent regarding data of subscriber choice.

Applicants respectfully submit that the Office Action does not establish a *prima facie* case of obviousness against claims 2, 8, 10, 11, 12 and 14 based on Yamaguchi. For at least this reason, applicants request that the rejections of claims 2, 8, 10, 11, 12, and 14 as being unpatentable over Yamaguchi be withdrawn.

d. Rejection Based On Thonnart

Claims 7, 22 and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 4,413,281 issued to Paul Thonnart (Thonnart). Thonnart does not show or suggest each step of the method of claim 7. The cancellation of claims 22 and 25 render this rejection moot with respect to these claims.

Claim 7 sets forth generating or assembling, in a network, a message which operates at an interactive image output device to generate a schedule. Thonnart does not

suggest such a message. The Office Action asserts that the Thonnart device outputs “a sequence of images according to a ‘schedule’ derived for a downloaded logic sequence which was stored in logic memory (27).” Thonnart discloses no schedule. Thonnart describes that the “selection of a page of teletext is effected in the message detector 26, for example as a function of a program recorded in the memory 27.” (Thonnart col. 4, ll. 41-44.) Thonnart does not suggest that the program recorded in memory 27 includes a schedule. Furthermore, even if the program is considered (incorrectly) to be a schedule, it is simply recorded in memory. There is no suggestion in Thonnart of a message which operates to generate the program. Thonnart thus does not show or suggest generating or assembling such a message as set forth by claim 7.

Claim 7 is directed to an interactive output apparatus. Claim 7 sets forth outputting a presentation that explains a receiver specific datum, making an offer during the step of outputting, and receiving input from a subscriber in response to the offer. Thonnart does not suggest this combination of interactive features. The Office Action acknowledges that Thonnart differs from claim 7 with regard to the offer. The Office Action cites to no suggestion in the prior art to modify Thonnart to include a step of making an offer.

Thonnart does not show or suggest outputting a presentation that explains a receiver specific datum. The Office Action merely asserts that Thonnart outputs a series of images that *contains* a receiver specific datum. However, the amendment filed July 8, 2002 deletes the term “contain” from this step of claim 7. The Office Action does not identify the receiver specific datum and does not assert that a presentation *explains* any such output receiver specific datum as required by claim 7 as amended.

Thonnart does not show or suggest making an offer and receiving input in response to the offer. The Office Action asserts that the Thonnart system could be used for a “student to have responded to a question presented in a first image sequence resulting in the display of the appropriate explanation and/or advancement to the next

succession of images.” However, claim 7 does not set forth asking a question, but rather sets forth making an offer. Thonnart is silent regarding making any offer.

Claim 7 further sets forth a remote site comprising a network having a plurality of transmitter stations. The Office Action acknowledges that Thonnart does not show a remote site comprising a plurality of transmitters. The Office Action asserts that it would have been obvious to have modified the system of Thonnart to have provided additional interactive programming over a plurality of additional TV channels thereby requiring a plurality of transmitters. However, claim 7 sets forth a network having a plurality of transmitter stations. The addition of a plurality of additional TV channels does not require a plurality of transmitter stations. Thonnart describes a teledistribution cable 34. (Thonnart col. 5, ll. 16-17.) A single transmitter station can transmit multiple channels over cable 34. In fact Thonnart describes that the disclosed system may receive information on multiple channels. (Thonnart col. 4, ll. 21-24.) There is no motivation to modify Thonnart to include a network having a plurality of transmitter stations as set forth by claim 7.

Applicants argued in their response filed August 3, 1998 to the prior Office Action that Thonnart does not show or suggest receiving input from a subscriber in response to an offer. The Office Action at page 63 purports to address applicants’ arguments. However, the Office Action does not address how Thonnart shows an offer.

Claims 22 and 25 depend from claim 7 and are thus patentable over Thonnart for at least the above reasons. The Office Action does not address the steps set forth by dependent claims 22 and 25 and, therefore, does not establish a *prima facie* case of obviousness against these claims. Thonnart does not show or suggest each step of claims 22 and 25. For example, Thonnart does not show or suggest a step of aggregating subscriber data as set forth in claim 22.

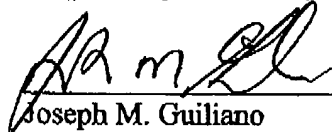
Applicants respectfully submit that the Office Action does not establish a *prima facie* case of obviousness against claims 7, 22 and 25 based on Thonnart. For at least this

reason, applicants request that the rejections of claims 7, 22 and 25 as being unpatentable over Thonnart be withdrawn.

F. Conclusion

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. Further, all pending claims are patentably distinguishable over the prior art of record, taken in any proper combination. Reconsideration and allowance of the instant application are respectfully requested.

Respectfully submitted,



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